University of Illinois **Department of Agricultural Engineering**

Bioenvironmental and Structural Systems Lab
Fan Description Form

Project Number: 90145 Series/Test: ____/____

Test Date: Nov. 8, 1990 File Name: _____

Fan

Make: Dayton

Model #: 7H215 or 7H316
corrected from 3C715

Serial #: _____

Manufacturer: Dayton

Blade Size: 48"

Orifice Dia.: 48.8"

Blade

Number: 4

Shape: propeller

Material: Galv. steel

Pitch: na

Clearance: 0.4"

Hub Diameter: 8"

Shutter

Material: Aluminum

Number Doors: 12

Number Rows: 2

Door Length: 23.8"

Location: Intake

Other Attachments

_____

Motor

Make: Dayton

Model #: 4K124

Serial #: mfr ref R608007

H.P.: 1

Amps: 10.3/5.15

Volts: 115/230

RPM: 1725

S.F.: 1.0

Drive Pulley Dia.: 3.3"

Axle Pulley Dia.: 10.9"

Center Spacing: 16"

Housing

Material: Galv. steel

Intake Area: 47.3"x48.3"

Discharge Area: 52.3"x52.3"

Depth: 37.5" top
24" bottom

Guards

Description: wire mesh

Spacing: 1" x 2"

Location: exhaust

TEST RESULTS

DAYTON 7H215/7H316

Test: 90145

Fan description:
48" belt drive, 1 hp Dayton 4K124 motor,
galvanized steel slant housing,
aluminum shutter and guard

Static Pressure in. water	Speed rpm	Airflow cfm	Efficiency cfm/Watt
0.00	496	19300	19.0
0.05	-	18300	17.4
0.10	494	17400	16.1
0.15	494	16100	14.5
0.20	494	14500	12.7